MONITORING, VERIFICATION AND EVALUATION UNIT
AGRICULTURAL POLICY REFORM PROGRAM

FERTILIZER PRICING AND DISTRIBUTION IN EGYPT

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ACDI	Agricultural Cooperative Development International
ALCOTEXA	Alexandria Cotton Exporters Association
APCP	Agriculture Production and Credit Project
APRP	Agricultural Policy Reform Program
ARC	Agricultural Research Center
ATUT	Agricultural Technology Utilization and Transfer (USAID funded project)
CAA	Central Audit Agency
CACU	Central Agricultural Coops Union
CALCOT	California Cotton
CAPC	Central Administration for Pest Control
CAPMAS	Central Agency for Public Mobilization and Statistics
CAS	Central Administration for Seeds
CASC	Central Administration for Seed Certification
CASP	Central Administration for Seed Production
CATGO	Cotton Arbitration and Testing General Organization
CIDA	Canadian International Development Agency
cif	Cost insurance and freight
CIT HC	Cotton and International Trade Holding Company
CN	Calcium Nitrate
CSPP	Cotton Sector Promotion Program (GTZ-funded)
CY	Calendar Year
EE/NIS	Eastern Europe / Newly Independent States
EE	Eastern Europe
ELS	Extra Long Staple
EPIQ	Environmental Policy and Institutional Strengthening IQC
EU	European Union
FAO	Food and Agriculture Organization (UN)
fob	Free on board
GARPAD	General Administration for Reclamation, Projects, and Agricultural Development
GATT	General Agreement on Tariffs and Trade
GIS	Geographic Information System
GOEIC	General Organization for Export and Import Control
GOE	Government of Egypt
GTZ	Deutsche Gesellschaft fuer Technische Zusammenarbeit
HC-RFM	Holding Company for Rice and Flour Mills
HCSWRMC	Holding Company for Spinning Weaving and Ready Made Clothes
IBTCI	International Business and Technical Consultants, Inc.
IFPRI	International Food Policy Research Institute
IIMI	International Irrigation Management Institute
IIP	Irrigation Improvement Project
IPM	Integrated Pest Management

IPO	Initial Public Offering
LS	Long Staple
MALR	Ministry of Agriculture and Land Reclamation
MD	Managing Director
MEFT	Ministry of Economy and Foreign Trade (former)
MEIC	Ministry of Economy and International Cooperation
MOU	Memorandum of Understanding
MPE	Ministry of Public Enterprise
MPWWR	Ministry of Public Works and Water Resources
MTS	Ministry of Trade and Supply
MVE	Monitoring, Verification and Evaluation Unit
PBDAC	Principal Bank for Development and Agricultural Credit
PD	Presidential Decree
PEO	Public Enterprise Office
PPC	Program Planning Committee
RDI	Reform Design and Implementation (APRP Unit)
RMC	Ready Made Clothes
RMG	Ready Made Garments
SFD	Social Fund for Development
STPU	Strategic Thinking and Planning Unit
TAMIS	Technical and Administrative Management Information System
TCC	Textile Clothing Consultants bv (Netherlands)
TCF	Textile Consolidation Fund
TMT-HC	Textile Manufacturing and Trade Holding Company
USAID	United States Agency for International Development

PREFACE

This study is one of a series of studies carried out in the process of verifying the Government of Egypt's accomplishment of various policy benchmarks under the Agricultural Policy Reform Program, tranche I. The material in this report was prepared so that it could be edited and incorporated directly into the Tranche I Verification Report. Because of the purpose of the study, its focus is quite narrow. It does not attempt to be a comprehensive analysis of the topics mentioned, but rather to fulfill the purpose defined by the content of the benchmarks. The MVE Unit publishes these reports in the spirit of encouraging a broader and lively discussion of important policy questions facing the agricultural sector decision makers.

The MVE unit would like to thank the authors of the study for the insights they provided through their analysis, which was accomplished in an extremely short period of time. Our appreciation is also extended to those in the public and private sectors who provided information and other assistance to the authors.

ABSTRACT

This paper provides analysis to verify two fertilizer benchmarks in the Agricultural Policy Reform Program, tranche I. Because nitrogenous fertilizer is so dominant in Egypt (more than 85% of the fertilizer used), the analysis covers only these types.

The first benchmark called for setting ex-factory prices in light of border prices. The analysis and findings show that this benchmark is partially accomplished. Only very recently have ex-factory prices been adjusted at all, whereas border prices change frequently according to supply and demand conditions in the world market.

The second benchmark was to eliminate quotas in the distribution of fertilizer. The analysis and findings show that this benchmark is also partially accomplished. The Government has taken some steps to return to the system of largely private distribution that prevailed before August, 1995, but fertilizer factories are not yet free to sell their output to whichever entities they like.

1. INTRODUCTION

1.1 Objective

The objective of this study is to verify the Government of Egypt's accomplishment of the following policy benchmarks under the Agricultural Policy Reform Program, tranche I:

I.B.2. Review ex-factory prices and set them in light of border prices, adjusting the price at least once per season. The definition of border prices will be according to the monitoring plan.

I.B.3. Eliminate government quota allocations of fertilizer, except in the case of market failure.

1.2 Interpretation of Benchmarks

For procedural reasons, in tranche I of APRP it was necessary to conduct meetings with the concerned parties (GOE and USAID) to arrive at mutually acceptable interpretations of the benchmarks. The interpretation(s) arrived at are the following:

I.B.2. This benchmark addresses the issue of fertilizer prices during a transition from administered prices to free-market prices. An ex-factory price for each grade of fertilizer is set by the MPE and the managers of the public production companies together. The concept of border price is clear in economics, although data requirements and specific commodities may present problems in some cases. However, setting prices in light of market-driven prices is not clear. Since there is no clear definition of in light of, verification will consist of comparing the set prices to border prices. The analysis will examine whether set prices are drawing closer to border prices (a long-run goal) and whether there is any correlation in the movement of the two price series. It will be difficult to assess Accomplishment with this benchmark.

Adjusting the price at least once per season@ means that fertilizer prices are changed at least once per cropping season. There are two cropping seasons per calendar year in Egypt.

I.B.3. The allocation referred to in the benchmark is from the factories to the distribution agents, including PBDAC, cooperatives, and the private sector.

Not every shortage and ensuing price escalation is caused by a market failure. True market failure often occurs when there are essential elements of a market, like information or infrastructure or access to capital, that are missing or underdeveloped. These deficiencies or collusion may lead to insufficient competition. If some part of the marketing system is restrained by policy, however, e.g. if imports are not allowed, then the cause of a market problem may not be a Amarket failure.@

1.3 Accomplishment of Benchmarks

According to the analysis and findings, the level of accomplishment of the benchmarks was:

I.B.2: Benchmark partially accomplished. As shown in Table 12 above, ex-factory prices over the past three years have not been adjusted twice yearly. Recently there has been a slight adjustment of these prices, although whether this is "in light of border prices" is impossible to determine. There was no trend of the two prices coming closer together because of adjustments to the ex-factory price.

I.B.3: Benchmark partially accomplished. With the end of the previous shortage, the re-liberalization of the fertilizer market continued gradually as of June 30, 1997. The GOE's commitment to this approach is reaffirmed in a letter from HE Minister Wally to the Director of USAID dated July 5, 1997. In it the Deputy Prime Minister and Minister of Agriculture and Land Reclamation states that "the private sector will be allowed to contract directly with the factories and its participation in the distribution of fertilizer to farmers will gradually increase towards attaining free competition among all partners, i.e., PBDAC, Cooperatives and Private sector." The private sector has currently obtained access to some production from the local factories, but formally they have no entitlement to production from within the factories' quotas.

2. ANALYSIS AND FINDINGS: Benchmark I.B.2. (Prices)

2.1 Sources of Information and Method of Analysis

The following were the sources of information and the method(s) of analysis used in this study:

The fertilizer team analyzed secondary data and conducted interviews with Mr. Mamdouh Kamal Abdel-Baki, Chairman, Board of Directors, AFRO-ASIAN Company for Development; Mr. Fouad Abdel-Moneim Hagrass, Chairman, Board of Directors, HAGROPOTA Company; Mr. Fathi El-Halwagi, Head, Department of Chemical Fertilizer, Ministry of Agriculture and Land Reclamation; Mr. Samir Fahmy, Chairman, Board of Directors, Samir Fahmy Group, Sam Trade, Unifert Misr, Unifert Alexandria, Tibah for chemicals, and United for Cereals; Mr. Yousri El-Khayat, Director of Marketing Sector, Abo Qir Fertilizer Factory; Mr. Abdel-Monem Aukeil, Chairman, Board of Directors, El-Nasr Company for Fertilizer, Talkha Plant; Mr. Abdl-Salam El-Gabaly, Owner and Chairman of the Board of Directors, El-Dawliah (International) Company for Fertilizer and Chemicals, and others.

2.2 Analysis and Findings

Egypt is among the countries with high rates of fertilizer application. According to FAO estimates in 1992, the rate of application amounted to 349 kilograms per hectare of agriculture land, only exceeded by South Korea with 437 kg per hectare. Between 1979 and 1991, the application rate in Egypt increased by 64.6 percent, which is one of the highest in the world. Nitrogen fertilizer (urea, ammonium nitrate, ammonium sulfate, and calcium nitrate) are the most important types of fertilizer in Egypt, accounting for 85.7 percent of total chemical fertilizer consumption in Egypt in 1996. Phosphoric and potassic fertilizer account for 12.1 percent and 2.2 percent of total fertilizer consumption in Egypt. All potassic fertilizer are imported, about 200,000 tons (Egypt does not produce these fertilizer) while the local production of phosphoric fertilizer is not sufficient to meet local requirements and the deficit is covered by imports. Accordingly, this report will limit presentation to nitrogen fertilizer.

2.2.1 Price Determination

Before economic reform, prices of chemical fertilizer were determined and fixed, not by market forces, but by government institutions, i.e., the Ministry of Agriculture or the Ministry of Industry. However, since the economic reform process started, fertilizer prices began to follow to some extent market forces, depending on the role played by the private sector in the production and marketing of fertilizer. Until June 1996, local production was completely in the hands of the public sector factories, while the private sector played a greater role in the marketing activities, especially with respect to imported fertilizer. The Principal Bank for Development and Agricultural Credit (PBDAC) played a declining role in the marketing of fertilizer until the summer of 1995, when there was a shortage of fertilizer and soaring prices. At that time it started to receive and distribute total local production at fixed, predetermined prices. Since June, 1996, ex-factory prices of fertilizer have not beenfully fixed by the Government, for the following reasons:

- By June 1996, Abo Qir fertilizer producing factory, which produces over 50 percent of local production, was changed from a public factory to a semi-private factory and thus operates under Law No. 159. Even though about 95 percent of its ownership is still in the hands of the public sector[1], but, this factory acts to some extent as a private business and is not restricted to the exact delivery quota determined by the Government.

- All fertilizer imported by private dealers are sold at free market prices, but within upper limits determined by a committee in the Ministry of Agriculture and Land Reclamation (MALR). This committee was formed by a ministerial decree in August 1995 to facilitate the issuance of import permits and determine the price ceilings for the custom-duty exempted fertilizer imports.

- All fertilizer distributed by PBDAC are sold exclusively at prices predetermined jointly by both the Ministry of Public Enterprises (MPE), the producing factories, and MALR. However, a portion of the PBDAC fertilizer and the amounts received by public trading companies usually illegally leaks to private traders, who in turn sell these fertilizer at free market prices, which are higher than those of PBDAC. Within the time available for the preparation of this report, it was not possible to get detailed information about the quantities and prices of these illegal transactions.

- As of September, 1996, a number of public companies have received specified quotas from El-Nasr and Abo Qir factories, and sold quota fertilizer to the private traders at a profit margin of 2-3 percent, without being subject to government pricing. These companies are mainly the Public Company for Trade and Chemicals, Plows and Engineering Company, Midtrade Co., and Multitrade Co.

- Traders (retailers) at the village and district levels get their requirements of fertilizer at different price levels from the following sources:
  - Illegal access to PBDAC stocks,
  - Public trading companies mentioned above, and
  - Private companies (in the form of private corporations who are newly established to receive a share of local production) who have been entitled to receive certain quotas of nitrogen fertilizer from the producing factories, especially Abo Qir factory.

This diversity of sources indicates the expected variation in the prices paid by farmers for the fertilizer. Prices paid by farmers in all cases are generally 4-7 percent higher than those of PBDAC. This price difference can be justified by the higher quality and other services provided by private traders. For example, El-Dawliah (International) Company for Fertilizer and Chemicals buys urea (Abo Qir) from the public companies at LE 560 per ton, while the price determined for the factories sales is LE 528.5, which means a profit margin of LE 31.5 per ton. The wholesale company sells this fertilizer to retailers at a margin of LE 2 per ton. Finally, farmers pay LE 566 per ton, whereas its price at PBDAC outlets is LE 558 per ton (for lower Egypt and Giza).

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[1]The General Authority for Petroleum owns 20 percent and the General Organization for Industrialization owns 13 percent of the factory's capital, while another 62 percent is owned by the four public banks, with the remaining 5 percent owned by the factory employees.

2.2.2 Ex-Factory Prices

Table 1 shows the ex-factory prices for fertilizer deliveries to PBDAC. The table indicates that there is an upward trend at a declining annual rate. Price increases between 1991/92 and 1996/97 for SEMEDCO fertilizer amounted to 57.5 percent for CN, 101.0 percent for AN, and 110.0 percent for urea. For Abo Qir fertilizer, price increases amounted to 110.0 percent for urea during the same period. However, ex-factory price increases between 1995/96 and 1996/97 varied among the different producing factories and among the different types of fertilizer, but ranged from 0.5 percent in the case of ammonium sulphate of El-Nasr Company to 7.3 percent in the case of urea for the same company. From July 1996 to February 1997, the ex-factory prices increased by 5.2 percent for ammonium sulphate of SEMEDCO., 10.3 percent for ammonium nitrate of SEMEDCO., and 6.2 percent for Abo Qir.

2.2.3 Border Prices

Table 2 shows the monthly border price of urea and ammonium sulfate during the last two years. The table indicates a downward trend for the price of urea since July, 1996 up to the end of April, 1997 while little change occurred in the price of ammonium sulfate.

From July, 1996 to March, 1977, the fob spot prices for urea in the Eastern European markets declined by about 18.0 percent, while the price of ammonium sulphate declined by 13.0 percent in the same market. The cif price of urea from the Eastern European market declined by 13.6 percent during the same period.

Since the second half of 1995, (that is from the beginning of the Fiscal Year 1995/96), the Egyptian ex-factory prices of urea (the most commonly traded nitrogenous fertilizer in the world market) have been significantly lower than world prices. At that time, the ex-factory price of urea (Abo Qir) was 30.4 percent lower than the monthly average of fob price of urea (bagged Eastern Europe), and 38.4 percent lower than the price in the Middle East market. In the early 1997, the local price was 0.3 percent lower compared with the fob price (bagged Eastern European market), and was 11.6 percent lower than that of the Middle East market. From January up to April, 1997, the world price of urea has significantly decreased. At the same time, Egyptian ex-factory prices increased. For deliveries to PBDAC, it varied from 5.2 percent for ammonium sulphate SEMEDCO, to 10.3 percent for ammonium nitrate SEMEDCO., and 6.2 percent for urea Abo Qir. Therefore, the gap between the world price of urea and the Egyptian ex-factory prices has declined tremendously, as indicated in Table 3.

If all transportation costs are added to the fob price of the EE market to obtain the C.I.F. prices for all Egyptian ports (these costs amounted to U.S.$ 18.5 per ton in 1996/97 compared to U.S.$ 17.5 per ton in 1995/96), the margin between the ex-factory prices and EE prices for urea declines from a maximum of 34.2 percent in the second half of 1996 to 10.8 percent as of the first half of 1997, as follows for urea produced at Abo Qir:

Table 1: Ex-Factory Fertilizer Prices Paid by PBDAC, 1991/92 to 1996/97

(LE per ton)

Year	SEMEDCO (El-Nasr)				Abo Qir	
	CN	AS	AN	Urea	AN	Urea
1991/92	139	232	189.0	236.0	----	236.0
1992/93	194	295	276.0	303.0	----	303.0
% increase	39.6	27.2	46.0	28.4	----	28.4
1993/94	215.25	316.05	343.35	472.5	----	472.5
% increase	11.0	7.1	42.4	55.9	----	55.9
1994/95	----	316.05	343.35	472.5	----	472.5
% increase	----	0.0	0.0	0.0	----	0.0
1995/96	----	363.3	362.25	462.0	388.5	472.5
% increase	----	15.0	5.5	-2.2	----	0.0
1996/97	----	365.3	380.0	495.5	399.0	495.5
% increase	----	0.5	4.9	7.3	2.7	4.9
Feb. 1997	----	384.3	419.0	----	----	526.0
% increase	----	5.2	10.3	----	----	6.2

Source: PBDAC, 1997, and Abo Qir Factory.

These prices of PBDAC sales are considered as farmgate prices, as the PBDAC distribution centers are generally located in the villages close to the agricultural lands of the villages.

Fertilizer wholesalers are offering (in April 1997) lower prices to retailers all over the different governorates for the stocks available of the imported fertilizer custom duty-exempted. Prices offered are LE 375 per ton for ammonium sulfate (20.6 %), LE 418 per ton ammonium nitrate (33.5 %), and LE 520 for urea (46 %). These prices represent losses ranging between LE 200 and LE 250 per ton from the import price. This is due to the accumulated stocks in both the private and PBDAC stores and increased supply over demand after the 1995 fertilizer shortage. Local production returned to normal with imports of about one million tons. These selling prices are even much lower than those determined by MALR as the maximum selling prices of these imported fertilizer, as indicated in Table 6.

Table 2: International Spot Prices of Nitrogen Fertilizer, 1993 -April 1997

	Urea (bagged)		AS (bagged)			Bulk Ammonia	
Year/Month	**ME**	**EE**	**EE**	**WE**	**USG**	**ME**	**NEW**
1993							
July	110-115	85-90	40-45	55-60	50-60	77-82	1-105
Aug.	110-115	85-90	50-55	55-60	50-60	77-82	1-105
Sept.	108-117	88-93	47-52	55-62	55-62	NA	NA
Oct.	115-121	91-95	52-55	55-58	55-60	80-87	100-105
Nov.	110-118	93-95	45-50	50-55	62-67	80-85	100-110
Dec.	119-128	93-98	52-55	55-60	55-65	85-90	110-120
1994							
Jan.	125-135	100-105	55-62	55-60	50-58	105-115	110-123
Feb.	125-130	95-100	55-60	60-65	55-65	115-125	115-123
March	120-130	100-110	50-58	65-72	50-63	115-130	120-138
April	130-135	115-120	50-55	60-65	50-61	120-140	135-138
May	135-140	116-120	55-60	55-62	55-60	130-140	130-140
June	133-138	110-115	50-55	55-60	55-65	125-140	140-150
July	140-145	120-125	50-55	55-60	55-65	140-150	140-145
Aug,	160-165	130-135	60-65	65-70	55-65	165-170	185-193
Sept.	173-175	140-145	60-65	65-70	55-65	190-200	195-205
Oct.	175-180	152-157	60-65	65-70	55-65	210-230	200-210
Nov.	195-200	165-170	60-65	65-70	55-65	200-210	185-193
Dec.	210-215	185-190	60-65	65-70	55-65	165-175	175-180
1995							
Jan.	233-238	200-205	60-65	65-70	55-65	175-185	185-193
Feb	235-240	210-220	60-65	65-70	55-65	195-200	195-200
March	235-240	210-220	60-65	65-70	55-65	210-220	210-220
April	235-240	185-190	60-65	70-75	55-65	220-230	230-240
May	190-200	160-170	60-65	70-75	55-65	220-225	225-230
June	182-187	160-185	65-70	70-75	55-65	200-210	205-210
July	195-200	175-180	65-70	70-75	55-65	190-195	190-195
Aug.	205-210	180-183	65-70	70-75	65-70	175-195	195-203
Sept.	225-230	200-205	65-70	70-75	65-70	180-190	190-200
Oct.	240-245	210-215	65-70	70-75	65-70	181-185	185-190
1996							
Jan.	215-220	200-205	65-70	70-75	65-70	145-150	180-185
March	220-225	200-205	75-80	80-85	65-70	160-165	172-175
April	202-207	170-175	75-80	80-85	65-70	150-155	172-175
May	200-205	170-173	75-80	80-85	65-70	150-160	172-175
June	210-215	185-188	75-80	80-85	65-70	150-160	170-172
8 July	210-215	190-192	75-80	80-85	65-70	145-155	167-168
Aug.	215-217	193-195	75-80	80-85	65-70	150-155	160-164
Sept.	200-202	180-184	75-80	80-85	65-70	190-200	175-180
Oct.	195-200	175-180	75-80	80-85	65-70	205-215	210-215
Nov.	201-205	183-185	75-80	80-85	80-85	220-230	210-215
Dec.	200-205	180-182	75-80	80-85	80-85	220-230	210-215
1997							
Jan.	190-192	165-168	75-80	80-85	80-85	200-205	175-185
Feb.	180-182	155-160	80-85	85-90	90-95	195-200	160-170
March	173-175	155-158	65-70	85-90	90-95	155-165	160-165
April	160-162	150-155	65-70	85-90	90-95	144-160	150-155

Source: Fertilizer Monthly Bulletin, International Price Guide. All prices FOB. Quotes are for last week

of the month. NA = Not Available. ME = Middle East, EE = East Europe (Black Sea), WE = West Europe, USG = U. S. Gulf, NWE = N. West Europe.

1. Urea Bagged = U.S.$ 10-13 above bulk price.
2. As bagged price U. S. $ 13-15 above bulk. USG price is bulk

Table 3: World Price of Urea (FOB) and Egyptian (Abo Qir) Price, 1994 to 28 April 1997

(U.S. dollars per ton)

Year	EE	ME	Abo Qir Price/Ton	% Difference EE	% Difference ME
M1 1994	106.0	120.0	132.0	+ 24.5	+ 10.0
M2 1994	147.0	163.0	133.0	- 9.5	- 18.4
M1 1995	187.0	205.0	133.0	- 28.9	- 35.1
M2 1995	191.0	216.0	133.0	- 30.4	- 38.4
M1 1996	186.5	209.0	133.0	- 28.7	- 36.4
M2 1996	183.5	205.0	133.0	- 27.5	- 35.1
M1 1997	156.0	176.0	155.6	- 0.3	- 11.6

Source: Calculated from FMB International (Table 2.); Price Guide, Abo Qir Factory.
M1 = First half of the Year (January - June) but from January to 28 April for 1997.
M2 = Second half of the year (July - December).
EE = Eastern Europe (bulk); ME = Middle East (bulk).

Table 4: Border (CIF) and ex-factory prices of urea, 1994-97

(U.S. dollars per ton)

Year	EE, C.I.F Price	Abo Qir Price	Difference U.S. $	Difference Percent
M1-1994	122.0	132.0	+ 10.0	+ 8.2
M2-1994	163.5	133.0	- 30.5	- 18.9
M1-1995	203.5	133.0	- 70.5	- 34.5
M2-1995	208.5	133.0	- 75.5	- 36.2
M1-1996	204.0	133.0	- 71.5	- 34.8
M2-1996	202.0	133.0	- 69.0	- 34.2
M1-1997	174.5	155.6	- 18.9	- 10.8

2.2.4 Farm Gate Fertilizer Prices. From the beginning of February, 1997, the prices paid by farmers for PBDAC sales prices of urea and ammonium nitrate have increased from those of July, 1996 as follows, as presented in Table 5:

LE 33 per ton of urea Abo Qir (6.3 % increase).
LE 41 per ton of urea Talkha (8.0 % increase).
LE 25 per ton of AN Abo Qir.(5.6 % increase).
LE 26 per ton of AN Talkha (6.3 % increase).

Table 5: PBDAC Retail Prices for Fertilizer in Lower Egypt Governorates

(LE per ton)

Type	Source	Price		
		1995/96 to July 1996	January 1997	February to May, 1997
CN 15.5 %		335	---	---
AN 33.5 %	Talkha	410	430	436
	Suez	450	---	---
	Abo Qir	450	460	475
	Qema	440	445	467
	El-Coke	---	410	423
Urea 46 %	Talkha	515	525	556
	Abo Qir	525	535	558
AS 20.6 %	Suez	410	410	425
	Imported	440	---	---
NITROLENE	Talkha	------	------	470

Source: PBDAC and MALR.

Note: Prices quoted are those for deliveries to Lower Egypt Governorates. Prices increase by LE 11.0 per ton for deliveries to Upper Egypt Governorates from Fayoum to Assiout. Prices increase by LE 19 per ton for deliveries to Upper Egypt Governorates from Sohag up to Aswan and El-Arish. The price of nitrolene is for deliveries all over the country.

Table 6: Maximum Pricing of Imported 1.5 Million Tons of Custom Duty-Exempted Fertilizer by the Committee in the MALR, from September 1995 to May 1997

(LE per ton)

Type of Fertilizer	Farm Price	
	Lower Egypt	Upper Egypt
Urea 46 %	780	790
Ammonium Nitrate 33.5 %	700	710
Ammonium Sulfate 20.6 %	440	440
Calcium Nitrate 26.0 %	695	700
Calcium Nitrate 15.5 %	440	450

Source: MALR, Department of Chemical Fertilizer, Custom-duty-exempted Fertilizer Committee.

3. ANALYSIS AND FINDINGS: Benchmark I.B.3. (Quotas)

3.1 Sources of Information and Method of Analysis

The following were the sources of information and the method of analysis used in this study:

The fertilizer team reviewed and analyzed secondary data and conducted interviews with Mr.Mamdouh Kamal Abdel-Baki, Chairman, Board of Directors, AFRO-ASIAN Company for Development; Mr. Fouad Abdel-Moneim Hagrass, Chairman, Board of Directors, HAGROPOTA Company; Mr. Fathi El-Halwagi, Head, Department of Chemical Fertilizer, Ministry of Agriculture and Land Reclamation; Mr. Samir Fahmy, Chairman, Board of Directors, Samir Fahmy Group, Sam Trade, Unifert Misr, Unifert Alexandria, Tibah for chemicals, and United for Cereals; Mr. Yousri El-Khayat, Director of Marketing Sector, Abo Qir Fertlizer Factory; Mr. Abdel-Monem Aukeil, Chairman, Board of directors, El-Nasr Company for Fertilizer, Talkha Plant; Mr. Abdl-Salam El-Gabaly, El-Dawliah (International) Company for Fertilizer and Chemicals, and others.

3.2 Analysis and Findings

Before discussing the fertilizer distribution quota system in Egypt, a distinction should be made between:

1. Announced policy and real practice in the distribution of fertilizer, and between
2. The general situation of the fertilizer in Egypt and the current specific problem of some dealers and distributors of fertilizer.

With respect to the first point, it should be noted that, even though there is no change in the government quota system of fertilizer where PBDAC is considered as the main channel through which 87 percent of the local production is distributed officially, with the remaining 13 percent through various cooperatives, small fertilizer traders at the village level are currently playing a substantial role in the distribution of chemical fertilizer. Considerable amounts of fertilizer leak from the official channels like PBDAC, public trading companies, and cooperatives to various private sector traders. Therefore, in theory little has changed with respect to the government allocation quota system, but in practice the private sector is playing a significant role.

The MVE producer survey asked farmers about their source of fertilizer. The results indicated that PBDAC and the cooperatives are the major suppliers of fertilizer at the farm level. There are a number of reasons for such a result. One reason is that, when fertilizer distribution was liberalized earlier, the control over type and amount of fertilizer provided to farmers that was formerly exercised by PBDAC was relaxed. Farmers then got whichever fertilizer they wanted whenever they wanted it, and the quality of the products improved through competition. While the main impact of the liberalization was to transfer distribution mostly to the private sector, it is important to remember that PBDAC's range of products and quality of products and services also improved through competition during this time.

Another reason why farmers get most of their fertilizer from PBDAC and the cooperatives is that the they can offer credit in conjunction with the purchase. Finally, the farmers' answers to the question about source of fertilizer to some extent probably summarizes their behavior over a recent period of time. After the shortage, PBDAC was the only supplier; the private sector began to play its informal role more recently. Even so, farmers get most of certain fertilizer, like potassium sulphate, from the private sector, because it is more readily available with the private suppliers than from PBDAC or the cooperatives.

With respect to the second point, the fertilizer shortage that occurred in the summer of 1995 was a temporary problem due to a decrease in supply and an increase in demand for the summer growing season of that year. Due to actions taken by the Government to alleviate the problem, the fertilizer market returned to normal conditions by summer 1996 . The supply of fertilizer in Egypt is currently greater than demand, with accumulated stocks available with PBDAC and the private sector.

3.2.1 The 1995 Fertilizer Shortage in Egypt

Before the fertilizer shortage, Ministerial Decree No. 212/1994 by the Minister of Public Enterprises dated 27.09.1994 formed a committee of experts to design the general policy for production, export, and import of fertilizer, headed by the Consultant to the Minister of Public Enterprises and including representatives from the Ministry of Agriculture, PBDAC, and representatives of the private sector.

The committee proposed on 20.12.1994 the following:

1. Forming a special committee for studying the fertilizer situation.
2. Fertilizer exports should be limited to 20 percent of total planned production with the 80 percent for local distribution.
3. Prohibiting exports for three weeks starting 01.01.1995 to 20.01.1995 to meet local demands.

However, due to the fertilizer shortage and the tremendous increase in fertilizer prices during the summer of 1995, PBDAC was asked by the Government to receive and distribute all local production of fertilizer as of 01.08.1995.

This shortage of chemical fertilizer was due mainly to the following factors:

- Exports of fertilizer, mainly ammonium nitrate and urea by producing factories due to high international prices, Abo Qir factory increased its normal exports of 20 percent of production to 25 percent while Talkha factory started to export, amounting to 30 percent of production. These two factories exported 28 percent of their urea and ammonium sulfate production. A total deficit of about 300,000 tons, especially during the main growing summer season.

- Carrying on repairs and maintenance activities by some factories within short periods, thus affecting local production. Repairs and maintenance of El-Nasr Company and Abo Qir reduced local production by 5 percent and 30 percent of export plans.

- Remaining quantities of fertilizer after exports were distributed as 75 percent to dealers, 25 percent to PBDAC and cooperatives, thus reducing PBDAC's role in balancing the market, with some of these factories not following the assigned production plan due to breakdowns.

- Fertilizer factories limited the share of fertilizer to PBDAC to 4.0, 3.3, 2.5, 0.3, and 0.3 million tons respectively during the period from 1989/90 to 1993/94. This was due to the great expansion of the private sector trading and exports during the same period.

- Limited number of fertilizer traders and distributors, as only about three thousand are registered while ten thousand are required, according to PBDAC report on "Fertilizer Distribution in Egypt."

- Monopolization of fertilizer trading during the shortage period was practiced by some distributors, thus increasing prices.

- Lack of government policy to increase domestic supply of fertilizer by encouraging imports *ahead of time,* i.e., before the growing season.

All these factors led to a shortage of fertilizer, especially nitrates and urea, causing price increases.

The Government took the following actions to solve the fertilizer problem that resulted in the 1995 summer season:

- Fertilizer exports were curtailed.
- The delivery and distribution of all fertilizer produced locally was made the responsibility of PBDAC only.
- One million tons of fertilizer were exempted from tariffs, increased later to1.5 million tons.

The Government took the following additional steps to help alleviate the situation:

- Formation of operation and maintenance teams to assure regular operation of the different public sector fertilizer producing companies.

- Immediate rehabilitation of Talkha and Suez fertilizer factories within 24 months.

- Took steps toward the fast completion of an additional plant (Abo Qir 3) to raise the productive capacity of the fertilizer producing companies.

- Preparation of additional productive capacity equal to the current productive capacity of Suez factory.

- Possible expansion of El-Coke factory.

3.2.2 Local Production of Fertilizer

After completing the repairs and maintenance of the fertilizer producing factories, production returned back to its normal annual rates of production of about six million tons, as indicated in Table 7. Within the reported period (from July, 1996 to March, 1997, three quarters of the year), production of nitrogen fertilizer amounted to about 4.4 million tons of 15.5 percent equivalent, while production of phosphorus fertilizer amounted to about 1.0 million tons, 15.0 percent. If this rate of production is continued for the remaining quarter of 1996/97, the expected production of nitrogen fertilizer would be estimated at 5.9 million tons, while phosphorus fertilizer would be estimated at 1.3 million tons. This is the normal production with the current available productive capacity. By 1998, the expansion of Abo Qir 3 would be completed which will nearly double the current productive capacity of the factory. According to the current estimates of the MALR for the requirements of nitrogen fertilizer, it amounts to about 6.0 million tons. Therefore, the current local production is nearly equal to requirements, if there are no exports. This means that, during the 1996/97 agricultural year, fertilizer requirements were met by local production without the necessity for importation. That is why most of the fertilizer imported by the private dealers and distributors is still stored, increasing fertilizer supply and pushing the fertilizer prices of the private sector traders downward.

By 1998, expected production will exceed demand, with resulting excess supply, and it will be necessary then to open the export market. Shortages are not expected due to:

- The current stocks available in both PBDAC and private stores, and

- The flexibility of the private dealers and distributors in taking actions for importing fertilizer in case of expected deficit. The experience of the 1995 crisis and the impressive performance of the distribution system dominated by the private sector during the period from 1991 to 1994 proves that the private sector acts quickly in response to market signals if no limitations are imposed on his functions.

It should be noted that the private sector should not be blamed for the 1995 fertilizer scarcity and price escalations, especially since they foresaw and informed the government authorities about the coming fertilizer shortage and recommended that the Government increase the domestic supply by removing duties on fertilizer imports. The price increase during the shortage period is the result of the operation of market forces, where supply is short of demand and there was a lack of effective government policy response to expand domestic supply *ahead of time* before the summer growing season. Routine steps and timing of obtaining import permits for fertilizer importers from MALR delays the effective marketing operation to increase domestic supply. It would be more suitable to specify certain chemical fertilizer that are allowed to enter the country, and let the private sector take the risk of acting in accordance with these specifications.

Since August 1995, the public sector fertilizer producing factories (SEMEDCO) are delivering their production mainly to PBDAC. However, Abo Qir factory, which has been "privatized" by June, 1996, was not delivering its fertilizer to PBDAC during November and December, 1996, as the Bank did

not agree on the price increases for the factory production. By February, 1997, and according to annual contracts, the factory started delivering about 50 percent of its fertilizer to PBDAC at LE 20 per ton less than the factory gate price for other buyers like public trading companies and cooperatives, who in turn sell to private dealers.

3.2.3 Duty Exemption for Fertilizer Imports

In response to government recommendations, a number of private fertilizer dealers and distributors started taking actions for the importation of the required amount. The amount of nitrogenous fertilizer imported by the private sector, mainly those of the Egyptian Association of Fertilizer Dealers and Distributors, amounted to about one million tons by April 1997. Most of these imports were made in the summer of 1996. The total amount planned for importation according to custom duty exemption (1.5 million tons) was not all imported, due to increased local production and imports accumulated due to a lower rate of distribution.

Several estimates were provided by the different private companies with respect to imports and stocks of the different fertilizer, as indicated in Tables 8 to 11. Regardless of the different estimates, the stocks of imported fertilizer with the private sector represent a serious problem to the functioning of the private sector. These stocks have been in storage for over a year with the resulting increase in costs of storage (amounting to LE 3 per ton per month) in addition to the deterioration in quality. Several requests have been made by the Egyptian Association of Fertilizer Dealers and Distributors to receive a share of local production of fertilizer in order to realize some profits that make up partially for their losses on the imported fertilizer.

The negative impact of limiting the delivery of local production mainly to public companies in addition to PBDAC is not only the financial losses to the private sector but also the reduction in the incentives of the private sector to respond to market forces, thus, reducing the efficiency of the market system. The Government recommended and encouraged the private sector to import these fertilizer to cover the deficit in supply through custom duty exemption. Now, after the problem is over, it is the Government that prohibits the private sector to handle the locally produced fertilizer, except under certain limited conditions recently. It is not clear why the private sector is not permitted openly to receive a share of local production of fertilizer after more than a year when the fertilizer crisis is over, with this amount of fertilizer on stock.

Table 7: Local Production of Chemical Fertilizer, July 1996 to March 1997

Factory and Type of Fertilizer	July-December 96 Ton	July-December 96 Ton 15.5%	January-March 97 Ton	January-March 97 Ton 15.5%	Total Ton	Total Ton 15.5%
El-Nasr Co. Coke:						
AN 33.5 %	17510	35020	11743	23486	29253	58506
AS 20.6 %	7995	10660	3958	5277	11953	15937
Total Coke	-------	45680	--------	28763	--------	74443
El-Nasr, Talkha:						
AN 33.5 %	142486	284972	25243	50486	167728	335458
AS 20.6 %	33297	44396	8100	10800	41397	55196
Urea46.0 %	262791	788373	45535	136605	308326	924978
Nitrolene 33.5 %	73405	146810	15260	30520	88665	177330
Subtotal	--------	1264551	--------	228411	---------	1492962
El-Nasr, Qema:						
AN 33.5 %	141410	282820	48580	97160	189990	379980
Abo Qir Co:						
AN 33.5 %	420200	840400	210000	420000	630200	1260400
Urea 46.0 %	241990	725970	137500	412500	379490	1138470
Subtotal	--------	1566370	---------	932500	---------	2398870
Total Nitrogen Fertilizer	--------	**3159421**	---------	**1286834**	---------	**4346255**
Egyptian Financial and Industrial Co:						
Superphosphate 15.0 %	352393	352393	117300	117300	469693	469693
Superphosphate 18.5 %	121773	145342	42015	50147	163788	195489
Subtotal	---------	497735	--------	167447	---------	665182
Abou Zaabal Co.						
Superphosphate 15.0 %	179559	179559	58390	58390	237949	237949
Superphosphate 37.0 %	30825	76035	7266	17923	38091	93958
Subtotal	---------	255594	-------	76313	--------	331907
Total Phosphorous	---------	**753329**	---------	**243760**	--------	**997089**

Source: MALR and producing factories.

Table 8: Imports of Nitrogen Fertilizer under the Customs Duty Exemption , Different Periods from 1-8-1995 to 15-4-1997

(Metric Tons)

Company	Ammonium Sulfate 20.6 %			Ammonium Nitrate 33.5 %			Urea 46 %		
	1st.	2nd.	Total	1st.	2nd.	Total	1st.	2nd.	Total
Hagropota	79372	12000	91372	---	---	---	---	---	---
Afro-Asian	14371	---	14371	13372	---	13372	---	---	---
Unifert.	50882	---	50882	3749	---	3749	---	250	250
Polyserve	6277	---	6277	6555	---	6555	---	---	---
ASEM Dose	9969	---	9969	14332	---	14332	---	---	---
Aboghneima	12178	---	12178	3210	---	3210	---	---	---
AlMonofiya	6099	---	6099	---	---	---	6466	---	6466
Al-Safa	5718	---	5718	---	6000	6000	---	---	---
Rowaa	6121	6000	12121	---	---	---	---	---	---
Abo Donkol	---	---	----	---	---	---	---	11000	11000
El-Dawlia	---	10000	10000	---	---	---	---	---	---
Shura	---	10000	10000	---	---	---	---	---	---
Total Private Sector.	**190987**	**49250**	**240237**	**41218**	**6000**	**47218**	**6466**	---	**6466**
Genco.		---	51423	---	---	---	---	---	---
PBDAC	51423 12599	---	12599	---	---	---	---	---	---
Total Public Sector		---	**64022**	---	---	---	---	---	---
Grand Total	**64022**	**49250**	**304259**	**41218**	**6000**	**47218**	**6466**	---	6466
	255009								

Source: Hagropota and MALR.

1st. = First period from 01.08.1995 to 15.04.1996.

2nd. = Second period from 05.07.1996 to 15.04.1997

Table 9: Quantities Imported of Ammonium Nitrate by the Private Sector under Custom Duty exemption and remaining stocks as of 11.12.1996

(Thousands tons)

Importing Company	Quantity Imported	Stocks remaining		
		Own Stores	Dealer Stores	Total
Sam Trade	41374	6235	1000	**7235**
Menofya	5295	997	2834	**3831**
Asem Dose	16598	2793	1920	**4713**
Abou Donkol	10285	2961	4679	**7640**
Dawlia	21821	1762	5303	**7065**
Abo Ghonema	21883	----	2049	**2049**
Rowaa	15331	1202	2063	**3265**
Hagrpota	31672	5037	---	**5037**
Afro-Asian	23954	3519	---	**3519**
El-Safaa	10221	3034	1500	**4534**
Total	198434	27540	21348	**48888**

Source: SamTrade Company.

Notes:

- Afro-Asian Company imported 10232 ton of Ammonium Nitrate 26% , with remaining 2000 tons in stocks.
- Rowaa company indicated that 5101 tons of Ammonium Nitrate sold to cooperatives with great difficulties in recollection.
- The price determined by the Fertilizer Committee in the MALR for imported Ammonium Nitrate was LE 700 including a profit margin for importers, while the actual selling price amounts to LE 460 to 470.

Table 10: Quantities Imported of Urea by the Private Sector under Custom Duty Exemption and Remaining Stocks as of 11.12.1996

(Tons)

Importing Company	Quantity Imported	Stocks remaining		
		Own Stores	Dealer Stores	Total
Sam Trade	8653	6823	900	7723
El-Menofya	6466	650	2969	3619
Total	15119	7473	3869	11342

Source: Sam Trade.

Note: The price determined by the fertilizer committee of the MALR was LE870 including profit margin for importers while the actual selling price amounts to LE 550 to 600 per ton.

Table 11: Fertilizer Stocks Available with the Private Sector and Selling Prices Fixed by the Government

Company	Urea 46 %			Ammonium Nitrate 33.5 %			Ammonium Nitrate 26 %		
	Stock (Tons)	Price LE/ Ton		Stock (Tons)	Price LE/ Ton		Stock (Tons)	Price LE/ Ton	
		Lower E.	Upper E.		Lower E.	Upper E.		Lower E.	Upper E.
Sam Trade	6225	870	880	5055	635	640	---	---	---
Hagrpota	---	---	---	4138	635	640	---	---	---
Menofya	435 *	870	880	3170	635	640	---	---	---
Afro-Asian	1435*	870	880	3519	635	640	1000	695	700
Rowaa	300*	870	880	650	635	640	---	---	---
Abo Donkol	---	---	---	2000	635	640	---	---	---
Total	8395	870	880	18532	635	640	1000	695	700

Source: Sam Trade.

* These are stocks from the quantity imported by Menofya Company (6466 tons) and distributed t the different companies as indicated.

Note: all these stocks are from imported fertilizer before July 1996 out of one million tons 15.5 % imported through custom duty exemption during that period but faced with lower local prices.

3.2.4 Action by The Peoples Assembly

By early 1996, several members of the Peoples Assembly raised the issue of the fertilizer shortage and its effects on agricultural production in Egypt. The issue was transferred to a combined committee of the Agriculture and Irrigation Committee and the Offices of the Economic, Industry, and Power Committee for investigation. Four proposals were offered by the combined committee:

1. Limiting the delivery and distribution of Fertilizer to PBDAC, as was practiced before.

2. Selecting a representative in each district who deals with wholesalers who in turn distribute fertilizer to retailers at the village level, with each channel composed of a representative, ten wholesalers, and fifty retailers on the average.

3. Determining a specific quota for each of PBDAC, the cooperative sector, and the private sector of 30%, 50%, and 20% respectively, with each receiving the quota from the main source directly.

4. Using the following three distribution systems:
   - PBDAC would be responsible about the receipt and distribution of fertilizer for the Old Lands, with the possibility of utilizing the stores of the cooperatives to increase its

distribution system at the village level.

- Land Reform Cooperatives would be responsible for the receipt and distribution of fertilizer for their lands from the producing companies directly.
- The private sector would be responsible for distribution of fertilizer in the New Lands in addition to the additional requirements in excess of the allocated quotas.

The recommendations of the Committee were as follows:

With respect to distribution:

- Short-term: Continuation of PBDAC in the receipt of total local production from the local producing factories, in addition to predetermined quantities for importation to cover the requirements for the current season.

- Long-term: PBDAC would continue to receive fertilizer for the Old Lands, while the private sector would be responsible for fertilizer for the New Lands, until local production is increased to meet requirements, which is expected by 1998.

With respect to foreign trade:

- Complete ban on exports until available quantities meet requirements.
- Continued importation of fertilizer exempted from custom duties until requirements are met (one million ton).
- Establishment of a fertilizer Fund to stabilize price fluctuations.
- Importation would be mainly by Government through PBDAC, with participation of the private sector.

With respect to manufacturing:

- Continued expansion of the productive capacity of the factories.
- Encouraging the private sector to participate in the expansion of fertilizer productive capacity.
- Designing a gradual policy for subsidizing agriculture, outside farm inputs.
- Eliminate any repairs during the growing season and make all coordination between factories during repairs and maintenance periods.

However, a letter (apparently with the force of a decree) signed by H.E. Dr. Youssef Wally, Deputy Prime Minister and Minister of Agriculture and Land Reclamation, indicated that the delivery and distribution of local fertilizer should be as follows:

PBDAC	87 percent.
General Cooperative for Agrarian Reform	8 percent
General Cooperative for Land Reclamation	5 percent

This system of fertilizer allocation is still in effect formally as of the end of June, 1997. However,

because it operates as a private company, Abo Qir factory has large quantities of local production that are transferred informally to the small private dealers at the village level, either from PBDAC stores or from those public sector companies receiving Fertilizer from the factories. By mid 1996, when Abo Qir factory started operating as a private factory, prices of the Fertilizer produced by this factory were increased. However, PBDAC, which is operating as a public bank, could not respond and approve this price increase, as it needs a ministerial decree to that effect. Accordingly, Abo Qir factory stopped delivering Fertilizer to PBDAC in November and December, 1996, and the factory production was delivered to public trading companies like Plows and Engineering Co., General Company for Trade and Chemicals, Midtrade Co., and Multitrade Co., in addition to general cooperatives and some traders who formed private corporations. These public trading companies resell these Fertilizer to the private traders and realizing a profit margin.

3.2.5 PBDAC Distribution and Handling of Fertilizer during Economic Reform

The Egyptian Government agreed with USAID in 1987 to execute an Egyptian agricultural policy reform program within the economic reform component of the Agriculture Production and Credit Project (APCP) executed by PBDAC and with assistance from USAID. From 1987 to 1993, the economic reform program was executed in agriculture gradually, based on six tranches. Each one is composed of a group of agricultural policy benchmarks. The six tranches included the transfer of farm input activities to the private sector, in addition to reconsideration of retail prices of fertilizer distributed by the public sector. During that period, the private sector came to play the major role in the trade and distribution of fertilizer, whether domestically or internationally through import and export activities, receiving fertilizer directly from the producing companies and distributing directly to farmers or agricultural cooperatives.

Due to the economic reforms, liberalization, and the adoption of market mechanisms in agriculture, the elimination of government subsidies for farm inputs resulted in great increases in prices, up to three times. In addition, sales taxes were set at 5 percent, custom duties on imports of nitrate and urea fertilizer at 30 percent, of ammonium sulfate at 10 percent, and of potassium sulfate at 5 percent. Furthermore, transportation costs increased at the rate of about 10 percent annually. These increases in costs of fertilizer without equivalent increases in prices for agricultural products reduced its distribution and utilization.

3.2.6 Price Rigidity and Efficiency of PBDAC

Price stability, whether for farm inputs or for agricultural commodities, was one of the main tools of agricultural policy in Egypt in the past. The main objective of that policy was to reduce the effect of price fluctuations on farm income. However, while there are beneftis to price stability, it also had a negative effect, not only on farm operations and the efficiency of the use of the agricultural operations, but also on the efficiency of some public sector organizations in performing their activities. Price stability with fixing the prices of farm inputs, especially chemical fertilizer, reduced the flexibility of a public organization such as PBDAC in acting in response to changing market conditions and differences in the quality of the input, as the private merchants do. The private sector can react quickly to such changes while PBDAC can not. Examples are:

- As PBDAC is obliged to distribute chemical fertilizer at fixed prices, it can not offer different prices

to the same fertilizer produced by different factories, even though the fertilizer is quite different in quality in addition to the differences in the quality of bags. The private sector has the flexibility of charging different prices according to the differences in quality of fertilizer and bags, which gives higher preferences for farmers to deal with private merchants rather than such public organization (if they are allowed to deal with fertilizer freely).

- In case of shortages or surpluses of a certain types of fertilizer the private sector can raise or reduce the price according to the changing conditions and thus, affect either supply or demand or both, and consequently lead to market stability. The PBDAC has no authority to act similar to the private sector.

- If PBDAC has surplus of a given fertilizer, it can not reduce the price to sell the surplus. The other option available is to store until it is needed. Storage represents cost to PBDAC which can not raise the price to cover that cost, with consequent losses.

- Being a government institution that provides security measures for chemical fertilizer. PBDAC incurs costs for keeping stocks on reserve. Who will pay this cost in the final analysis?